



NatureServe  
A Network Connecting Science With Conservation

A Network Connecting Science with Conservation

# **Reader-Friendly Field Guides to Natural Communities:**

Communicating Science Effectively to Park Managers and Visitors



Project Summary

In partnership with the National Park Service and the Virginia, Maryland and West Virginia Natural Heritage Programs, NatureServe has developed a draft classification of natural communities for the National Capital Region (NCR), which follows the NPS standard of the National Vegetation Classification. This effort resulted in technical descriptions of about 125 communities in 11 NCR parks.

To facilitate the use of these data by park managers and the public, the Urban Ecology Research Learning Alliance, NCRs Research Learning Center, and NatureServe are designing reader-friendly field handbooks and brochures in printed and web-based formats. These 6x9 field guides will help park managers and visitors to identify and understand the incredible array of natural communities in the region.

## Project Goals

- Communicate effectively about the natural communities of the parks
  - Translate technical data so that it is usable by NPS resource managers and the public
  - Support education and interpretation by producing easy-to-understand products that enrich the visitor experience

## About Natural Communities

  - A “natural community” is a specific combination of plants and animals that grow and live in association with each other in a particular geographical area and/or physical environment.
  - Natural communities are classified primarily by their plants, and can cover an area of thousands of acres or one as small as a few acres or less.
  - Natural community classifications are widely used in national park resource management. Uses include providing an understanding of ecological processes, defining restoration targets, providing baselines to assess change over time, monitoring sensitive species habitats, guiding management decisions, and actions like prescribed burning, invasive species control, and placement of trails and visitor facilities.

About Natural Communities

- A “natural community” is a specific combination of plants and animals that grow and live in association with each other in a particular geographical area and/or physical environment.
  - Natural communities are classified primarily by their plants, and can cover an area of thousands of acres or one as small as a few acres or less.
  - Natural community classifications are widely used in national park resource management. Uses include providing an understanding of ecological processes, defining restoration targets, providing baselines to assess change over time, monitoring sensitive species habitats, guiding management decisions, and actions like prescribed burning, invasive species control, and placement of trails and visitor facilities.

# Standard Vegetation Classification Report

- Great scientific content
  - Provided as raw data, without interpretation
  - No graphics
  - Scientific names only
  - Difficult to understand for a non-expert

To facilitate the use of these data by park managers and the public, the Urban Ecology Research Learning Alliance, NCR's Research Learning Center, and NatureServe are redesigning reader-friendly field handbooks and brochures in printed and web-based formats. These 6x9 field guides will help park managers and visitors to identify and understand the incredible array of natural communities in the region.

Reader-Friendly Changes

- Information customized to NCR
  - Maps, diagrams, and illustrations
  - Key attributes of data highlighted
  - Designed as a more useful reference for park staff
  - Aimed at park visitor as well as staff
  - Clear, appealing graphic design
  - Vivid, readable, non-technical language
  - Describes vegetation classification in the context of the park's natural history
  - Relates the science to what is seen along the trail

(Sample pages for Cove Forest Ecological System)



P.

and enzymes, and it has the most negative influence of the factors on the rate of production. The higher the temperature, the greater the rate of production, because with it there is a greater share of heat and other effects. The effect of light on the rate of production is also very great. By increasing the intensity of light, we can increase the rate of production. But the effect of light on the rate of production is not proportional to its intensity. There is a point at which the rate of production begins to decrease again. This is called the saturation point. The rate of production is also influenced by the nature of the soil and the stage of production. The rate of production is higher in the early stages of production, and it decreases as the crop grows older.



An NPS natural resource manager and NatureServe ecologist gathering plot data. / Photo by NatureServe



**Black-throated blue warbler**, a migratory songbird that relies on forest habitat protected in NCR parks. /



Natural communities are defined primarily by the dominant vegetation types found there.